DOCUMENT RESUME

ED 108 198 CS 001 998

AUTHOR	Okada, Masahito; And Others
TITLE	The Development of the Harper & Row Grade Three Learning Mastery System.
INSTITUTION	Southwest Regional Laboratory for Educational Research and Development, Los Alamitos, Calif.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
REPORT NO	SWRL-TN-3-71-14
PUB DATE	Aug 71
NOTE	27p.; See related documents CS001996-997, 001999-002002
EDRS PRICE	MF-$0.76 HC-$1.95 PLUS POSTAGE
DESCRIPTORS	Educational Objectives; Grade 3; *Instructional Materials; Learning Activities; Primary Education; *Reading Instruction; *Reading Programs; Reading Skills; *Teaching Methods; Teaching Models
IDENTIFIERS	*Learning Mastery Systems

ABSTRACT

The rationale, procedures, and specifications employed in the development of the Harper & Row grade-three reading program Learning Mastery System (LMS) are described in this document. The LMS is a set of materials and procedures prepared by the Southwest Regional Laboratory (SWRL) as an objectives-based framework to assist in managing the learning activities of existing reading programs and materials. It is concluded that the Harper & Row grade-three reading program LMS parallels the first- and second-grade reading program LMSs. The information and data for the development of the LMS are presented in both narrative and tabular forms. (Author/RB)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

U S DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED108196

SWRL

SOUTHWEST REGIONAL LABORATORY TECHNICAL NOTE

DATE: August 17, 1971

NO: TN 3-71-14

TITLE: THE DEVELOPMENT OF THE HARPER & ROW GRADE-THREE LEARNING MASTERY SYSTEM

AUTHOR: Masahito Okada, Jacqueline Maeder. Leonard Streeter, Patricia Milazzo

ABSTRACT

This document describes the rationale, procedures, and specifications employed in the development of the Harper & Row Grade-Three Learning Mastery System.

CS001 998

This document is intended for internal staff distribution and use. Permission to reprint or quote from this working document, wholly or in part, should be obtained from SWRL, 11300 La Cienega Boulevard, Inglewood, California, 90304.

THE DEVELOPMENT OF THE HARPER & ROW GRADE-THREE LEARNING MASTERY SYSTEM

A Learning Mastery System (LMS) is a set of procedures and materials that can be used by teachers to assess children's learning from an instructional program and provide remediation when it is needed. This document describes the development of the Learning Mastery System prepared for the Harper & Row Third-Grade Reading Program (H&R-3).

Development Strategy

The Harper & Row First- and Second-Grade Learning Mastery Systems had been developed previously. The Third-Grade Learning Mastery System is an extension of the First- and Second-Grade systems. Terms, procedures, and materials developed for the third-grade system were modeled after the first and second-grade systems in order to provide continuity to the three levels of the system. Terms used to describe materials and procedures remain unchanged, although the procedures and materials were modified to fit the advanced nature of third-grade reading instruction. The basic structure of the three levels of the system is the same.

Content Analysis

The analysis of the Harper & Row Third-Grade Reading Program was limited to the two California state-adopted texts, From Faraway Places and From Bicycles to Boomerangs. From Faraway Places is the Strand 1 Developmental Reader. It is in Strand 1 that the basic reading skills are developed. From Bicycles to Boomerangs, is the Strand 2 Reader. The emphasis in Strand 2 is the development of reading skills in the various subject matter areas.

The content of both texts was analyzed and reading outcomes were inferred. The reading outcomes were then categorized under the general skill areas shown in Table 1.

The content of the two basic texts was subdivided into 16 manageable LMS units as shown in Table 2. The division of the texts into LMS units was based on an analysis of each of the stories in terms of the number of pages, new words, and new word elements as shown in Appendices A and B and on the existing structure of the texts. LMS units conformed as much as possible to the major divisions and sections found in the texts.

Specifications for LMS H&R-3

Teacher's Manual

A 43 page (8½" x 11") Teacher's Manual was prepared. The manual is divided into two major sections. Section 1 presents an overview of the Learning Mastery System without going into details about its classroom use. This section describes the LMS objectives, materials, and organization. The purpose of this section is to provide the reader with an understanding of the characteristics of LMS.

Section 2 contains the detailed information necessary for regular use of LMS in the classroom. This section describes the teaching sequence followed throughout LMS. It also lists specific learning outcomes and procedures for LMS on a unit-by-unit basis. Section 2 constitutes the primary reference source for the teacher throughout the year.

The Appendix contains a listing of all first-, second-, and third-grade LMS word elements and third-grade word-attack words. The Appendix provides teachers with a concise overview of the word elements and word-attack words found in LMS.

Table 1

GRADE 2 HARPER & ROW LMS READING OUTCOMES

	What the Child Does or Learns to Do
1 - Words:	Sight-read a basic vocabulary for Grade 3.
2 - Word Elements:	Say the sounds "made by" certain letters and letter combinations.
3 - Word-Attack:	Sound out and read new words composed of previously learned word elements.
4 - Variant Letter Sounds:	Identify words containing particular sounds of variant vowels and consonants.
5 - Structural Analysis:	Identify correctly accented words, the number of syllables in a word, the correct spelling of a plural ending, prefix or suffix for a given word, the component parts of compound words that rhyme, and rules for forming verb tenses.
6 - Linguistic Skills:	Place verb forms into sentences, transform declarative sentences to interrogative sentences, and distinguish question marker words.
7 - Comprehension:	Select the appropriate word for a given definition, identify the correct word to complete a given sentence, select the appropriate answer to a direct or inferential question about a paragraph or a poem, and identify a sequence of events.
8 - Study Skills:	Follow directions, select the appropriate respelling for a given word, select the correct procedure for solving an arithmetic problem, and select answers to questions requiring map-reading skills.

Table 2

CONTENT DISTRIBUTION OF HARPER & ROW GRADE THREE READING PROGRAM

LMS UNIT	TEXTBOOK	PAGES IN TEXTBOOK	NEW WORD ELEMENTS	NEW WORDS
1	From Faraway Places	6-36 (31)	2	42
2	From Faraway Places	37-78 (42)	3	57
3	From Faraway Places	79-112 (34)	2	53
4	From Faraway Places	113-160 (48)	5	80
5	From Faraway Places	161-212 (52)	5	68
6	From Faraway Places	213-246 (34)	3	55
7	From Faraway Places	247-290 (44)	4	58
8	From Faraway Places	291-347 (57)	1	68
9	From Bicycles to Boomerangs	9-38 (30)	-	40
10	From Bicycles to Boomerangs	39-72 (34)	-	83
11	From Bicycles to Boomerangs	73-110 (38)	-	65
12	From Bicycles to Boomerangs	111-152 (42)	-	61
13	From Bicycles to Boomerangs	153-178 (26)	-	47
14	From Bicycles to Boomerangs	179-204 (26)	-	31
15	From Bicycles to Boomerangs	205-218 (14)	-	39
16	From Bicycles to Boomerangs	219-253 (35)	-	61

Teaching Guide

The Teaching Guide (5" x 8" index card) provides teachers with a systematic overview of the Learning Mastery System.

Placement Test, Placement Test Record Sheet

The H&R-3 Placement Test is an individually administered test consisting of 30 items (words and word elements) printed on one side of a 5" x 8" index card. The word elements section contains 15 second-grade word elements and the word section contains 15 second-grade words. The purpose of the Placement Test is the assessment of pupil readiness for regular third-grade instruction. Pupils are required to attain a score of 12 on each of the 15 item subtests. Inasmuch as the items are selected primarily from the latter part of the second-grade reader, only pupils who have received instruction through a major portion of the second-grade reader are expected to meet criterion on the Placement Test. The Placement Test Record Sheet (8½" x 11") permits easy scoring and recording of test results. The Placement and Review Procedures section of the Teacher's Manual describes the use of Placement Test scores in detail.

Review Exercises

The Review Exercises are of three types. The Word Review Exercises provide a means for rapid review of high frequency first- and second-grade words. Frequency was based on a computer analysis of the text of From Faraway Places. The Word Element Review Exercises incorporate all word-elements taught in the first and second-grade LMS. The Optional Word Review Exercises include low frequency first and second-grade words (see Table 3).

Table 3

REVIEW EXERCISE SPECIFICATIONS

	Number of Words or Elements	Number of Sections	Number of 8½" x 11" Pages
Word Review Exercise	288	12	4
Word Element Review Exercise	138	6	2
Optimal Word Review Exercise	288	12	4

Criterion Exercises and Criterion Exercise Record Sheet

A Criterion Exercise (5" x 8" index card) is administered at the end of each LMS unit to assess pupil learning on Outcome 1-3 for the unit. There is one Criterion Exercise for each of the 16 units. Table 4 below presents an overview of the content of each of the 16 Criterion Exercises. The selection of test words for the Criterion Exercise was on a stratified random basis. In units 1-8, one word judged to be difficult, one easy, and three of average difficulty were chosen for each of the exercises. In Units 9-16 the ratio was two difficult, six average, and two easy words. Word elements were randomly selected from the pool of elements from each LMS unit. Word attack words tested were novel words generated from word elements found in the unit combined with previously learned words and/or elements. Criterion Exercises for Units 9-16 did not contain word-elements or word attack sections in as much as they correlated with the Strand 2 Reader, From Bicycles to Boomerangs, which is the subject matter Strand.

Table 4

CRITERION EXERCISE SPECIFICATIONS

LMS Unit	Number of Items			
	Words	Word Elements	Word Attack	Total
1	5	5	5	15
2	5	5	5	15
3	5	5	5	15
4	5	5	5	15
5	5	5	5	15
6	5	5	5	15
7	5	5	5	15
8	5	5	5	15
9	10			10
10	10			10
11	10			10
12	10			10
13	10			10
14	10			10
15	10			10
16	10			10

The Criterion Exercise Record Sheet (8½" x 11" index) provides a means for recording the results of the 16 Criterion Exercises for all pupils.

Word Elements and Word Attack

Units 1-8 each incorporate four groups of six word-attack words. These word groups have in common a single word element to which is added known consonants, blends, and clusters to form new words. A dotted line separates each list into two parts. Words above this line are generally monosyllabic. These single monosyllabic words are transformed using affixes, inflections, or known words to make additional related polysyllabic words which are listed below the dotted line. An example from Unit 1 is provided below. See Appendix C for a complete listing of word elements and word-attack words.

1. main	7. glen	13. spike	19. wren
2. pain	8. glance	14. spell	20. wrench
3. strain	9. glide	15. spoke	21. wring
4. mainstreet	10. glider	16. spelling	22. wrens
5. painful	11. glancing	17. spiked	23. wringer
6. strained	12. glens	18. spoken	24. wrenches

Whenever possible the word elements taught in the Harper & Row Reading Program were used as the basis for generating word-attack words. When this was not possible, word elements derived from words found in the LMS unit were used to form new word-attack words.

Auxiliary Exercises and Auxiliary Exercise Record Sheets

The Auxiliary Exercises assess pupil learning on Outcomes 4-7 for each LMS unit. There are 16 four page (8½" x 11") Auxiliary Exercises. A complete listing of Auxiliary Outcomes tested in each unit is provided in Table 5. The Auxiliary Outcomes were selected from the outcomes which were inferred from an analysis of the Teacher's Edition of the two basic text books. Selection was based upon the amount of emphasis given in the texts to particular outcomes and the testability of the outcome by means of paper and pencil instruments. All specific outcomes are referenced in the LMS Teacher's Manual to pages in the Teacher's Edition of the basic reading texts from which the specific objectives were inferred.

Auxiliary Exercise procedures and materials were modified in order to permit self-administration by the pupils. This considerably eases the administrative load required of teachers and increases the likelihood that the optional Auxiliary Exercises will be used by classroom teachers.

The Auxiliary Exercise Record Sheet (8½" x 11") permits the recording of children's Auxiliary Exercise Scores for the 16 units.

Practice Exercises

Practice Exercises are provided for the remediation of Outcomes 1-3 in each unit. These exercises give children additional instruction and practice on each outcome that they have not yet mastered. Practice Exercises may also be administered to groups or to individuals before the Criterion Exercise. Practice Exercises are printed on two sides of 8½" x 11" sheets. Each side contains three sections of 24 items, each.

Table 5

AUXILIARY OUTCOMES CHART

HARPER & ROW GRADE 3 LMS

UNIT	4 Variant Letter Sounds	5 Structural Analysis	6 Linguistic Skills	7 Comprehension	8 Study Skills
1	Identify words containing short o, long and short i, short e, and soft c.			Select the appropriate word for a given definition. Select answers to direct or inferential questions about a given paragraph.	Identify correctly alphabetized words.
2		Select the appropriate rule for forming verb tenses.		Select the appropriate word for a given definition. Select answers to direct or inferential questions about a given paragraph.	Select answers to questions requiring map reading skills.
12 3		Select words that have a given number of syllables.		Select the appropriate word to complete a given sentence. Select answers to direct or inferential questions about a given poem.	Select the appropriate answer to correspond to a given direction.
4	Identify words containing silent g, silent t, the zh sound of g and s, long a and long i. Identify diacritical marks and select the appropriate sounds of the vowel pairs oa, ea, and ai.		Select the appropriate verb form to complete a given sentence.	Select the appropriate word for a given definition. Select answers to direct or inferential questions about a given paragraph.	

UNIT	4 Variant Letter Sounds	5 Structural Analysis	6 Linguistic Skills	7 Comprehension	8 Study Skills
5		Identify words that rhyme. Select the appropriate suffix for a defined word.		Select the appropriate word for a given definition. Select answers to direct or inferential questions about a given paragraph.	
6	Identify words having the sound of long e and silent l, k, and d.	Select the appropriate prefix for a defined word. Select the appropriate rule for forming the plural of a given word.		Select the appropriate word for a given definition. Select answers to direct or inferential questions about a given paragraph.	
7		Select words that have a given number of syllables. Identify correctly accented words.	Distinguish question marker words. Transform telling sentences into question sentences.	Select the appropriate word for a given definition. Select answers to direct or inferential questions about a given paragraph.	
8		Select two words that form a compound word.		Select the appropriate word for a given definition. Select answers to direct or inferential questions about a given paragraph. Identify a sequence of events.	

UNIT	4 Variant Letter Sounds	5 Structural Analysis	6 Linguistic Skills	7 Comprehension	8 Study Skills
9	Identify words containing short o, soft c, sound of ay, and the two sounds of ea.	Identify the number of syllables in a given word. Select two words that form a compound word.		Select the appropriate word for a given definition. Select a word to complete a given sentence.	
10	Identify words containing the f sound of ph, z sound of s, sound of au, and silent gh.			Select the appropriate word for a given definition. Select a word to complete a given sentence.	Identify the appropriate respelling for a given word.
11	Identify words containing hard c, sound of e before r, short u sound of oo, and the z sound of s.	Select the appropriate prefix or suffix for a given word.		Select answers to direct or inferential questions about a given paragraph.	
12			Select the appropriate verb form to complete a given sentence.	Select the appropriate word for a given definition. Select answers to direct or inferential questions about a given paragraph.	

UNIT	4 Variant Letter Sounds	5 Structural Analysis	6 Linguistic Skills	7 Comprehension	8 Study Skills
13		Select two words that form a compound word. Identify correctly accented words.		Select the appropriate word for a given definition. Select answers to direct or inferential questions about a given paragraph.	
14	Identify words containing voiced <u>th</u>, soft <u>g</u>, hard <u>c</u>, soft <u>c</u>, and short <u>u</u>.			Select the appropriate word for a given definition. Select answers to direct or inferential questions about a given paragraph.	Identify the correct arithmetic procedure for solving a word problem.
15				Select the appropriate word for a given definition. Select answers to direct or inferential questions about a given paragraph.	Identify the appropriate respelling for a given word.
16			Select the appropriate verb form to complete a given sentence.	Select the appropriate word for a given definition. Select answers to direct or inferential questions about a given paragraph. Identify a sequence of events.	

The Word Exercises contain all sight words for the units. The Word-Element Exercises contain all word elements introduced in the unit. The Word-Attack Exercises contain 24 word-attack words as described previously. A listing of the basic content of each of the Practice Exercises is provided in Table 6.

Conclusion

The Harper & Row Third-Grade Learning Mastery System clearly parallels the first- and second-grade Learning Mastery Systems. The basic structure remains unchanged. Procedures and materials have been modified to fit the advanced reading skills of most third-grade pupils. The Auxiliary Exercises have been designed for independent use by pupils and a greater stress has been placed on comprehension skills. The existing set of prototype materials will be modified and revised in the coming year on the basis of feedback from tryout teachers.

Table 6

PRACTICE EXERCISE SPECIFICATIONS

LMS Unit	Number of Word Exercises	(Number of New Word per Exercise)	Number of Word Element Exercises	Number of Word Attack Exercises	Total Number of Exercises
1	2	(21)	1	1	4
2	3	(19)	1	1	5
3	3	(18)	1	1	5
4	4	(20)	1	1	6
5	3	(23)	1	1	5
6	3	(18)	1	1	5
7	3	(19)	1	1	5
8	3	(23)	1	1	5
9	2	(20)			2
10	4	(21)			4
11	3	(23)			3
12	3	(20)			3
13	2	(16)			2
14	2	(16)			2
15	2	(20)			2
16	3	(20)			3

APPENDIX A

Content Analysis of Harper and Row Grade Three Reading Program

From Faraway Places - Strand 1

Total Number of Pages - 347

Total Number of New Words - 483

Total Number of New Word Elements - 22

STORY	PAGES	NO. of NEW WORDS	NO. of NEW ELEMENTS
Section Title:			
Home From the North Woods	6	1	- ward
Vacation Almost Over	9 - 18 (10)	27	
Talking Things Over	19 - 26 (8)	7	gl
A Map and an Idea	27 - 33 (7)	5	
Did You Really?	34 - 35 (2)	3	
Daydream	36		
Section Title:			
Marco and the Donkey Cart	37	3	
Grandfather and Marco	42 - 44 (3)	8	
The Wonderful Cart	45 - 47 (3)	9	wr - ment
What? No Donkey?	48 - 52 (5)	7	
An Astonishing Idea	53 - 56 (4)	11	gu
Thank You, No!	57 - 60 (4)	5	
Serafina	61 - 65 (5)	6	
On and Off Again	66 - 69 (4)	6	
Music for Serafina	70 - 73 (4)	1	
Bravo, Marco!	74 - 77 (4)	1	
Temperamental	78		

STORY	PAGES	NO. of NEW WORDS	NO. of NEW ELEMENTS
Section Title:			
Ramon Makes a Trade	79	2	
The Storyteller's Story	83 - 84 (2)	4	
Down, Down the Mountain	85 - 89 (5)	14	- ea , - ear
In the Market Place	90 - 92 (3)	8	
The Stall of the Bird Cages	93 - 96 (4)	8	
The Serape Weaver	97 - 99 (3)	7	
Once Again the Merry-Go-Round	100 - 105 (6)	6	
A Very Good Day, Indeed	106 - 111 (6)	5	
Mountaintop	112		
Section Title:			
Kobo and the Wishing Pictures	113	3	
Wishing Day for Mitsu	117 - 119 (5)	9	
Looking Forward to Wishing Day	120 - 124 (5)	13	- ist
Footsteps at the Door	125 - 129 (5)	13	
What Is My Wish to Be?	130 - 144 (7)	29	- some
The Day before Wishing Day	145 - 151 (7)	9	
Wishing Day at Last	152 - 155 (4)	2	
The Fortunetelling Bird	156 - 158 (3)	1	
Haiku	159		
Haiku	160	1	
Section Title:			
Good Luck Duck	161	3	
Grandmother's Story	165 - 167 (3)	9	- tion
Quiet Valley	168 - 172 (5)	12	mis -
Inside the Gate	173 - 179 (7)	12	

STORY	PAGES	NO. of NEW WORDS	NO. of NEW ELEMENTS
What Shall I Do Now?	180 - 185 (6)	11	- ble
What Do You Know About That?	186 - 191 (6)	11	ple
I'll Take a Chance	192 - 195 (4)	1	
Excitement in the Air	196 - 202 (7)	7	- ought
Another Quiet Valley	203 - 208 (6)	2	
Good Luck Duck	209 - 211 (3)		
Just Me	212		
Section Title:			
The Peddler of Ballaghadereen	213	3	
Pictures and Places	217 - 220 (4)	8	- tle
Cabin at the Crossroads	221 - 224 (4)	10	
With a Pack on His Back	225 - 228 (4)	10	dis
A Teller of Tales	229 - 231 (3)	8	
The Peddler's Dream	232 - 234 (3)	4	
Dublin Town	235 - 241 (7)	10	
Gold Under the Cherry Tree	242 - 245 (4)	2	- ough
Fairies	246		
Section Title:			
Kobi, The Herdboy	247	3	
Curiosity	251 - 255 (5)	7	
A Good Milker	256 - 260 (5)	13	
Uncle Jacob	261 - 265 (5)	9	
Angels round My Bed	266 - 269 (4)	7	
The Cattle Fair	270 - 274 (5)	5	- ten
A Friend in Need	275 - 279 (5)	7	- eer

STORY	PAGES	NO. of NEW WORDS	NO. of NEW ELEMENTS
A Troublesome Goat	280 - 283 (4)	2	
A Friend Indeed	284 - 288 (5)	5	- igh
Wouldn't It Be Wonderful?	289		- ight
A Troublesome Fellow	290		
Section Title:			
Wings Against the Wind	291	2	
A Good Combination	295 - 299 (5)	8	
Papa Jacot	300 - 305 (6)	15	- dle
Who Can't Swim?	306 - 308 (3)	6	
Robber Six-Toes	309 - 314 (6)	13	
Fripoun Must Go	315 - 320 (6)	10	
Clipped Wings	321 - 327 (7)	2	
The Blessing of the Sea	328 - 332 (5)	3	
Return of the Evil One	333 - 337 (5)	2	
What I Love to Do	338		
Section Title:			
Americans All	339		
And So It Ended	340 - 347 (8)	5	

APPENDIX B

Content Analysis of Harper and Row Grade Three Reading Program

From Bicycles to Boomerangs - Strand 2

Total Number of Pages - 253

Total Number of New Words - 439

Total Number of New Word Elements - 0

STORY	PAGES	NO. of NEW WORDS	NO. of NEW ELEMENTS
Unit 1: Be a Better Reader	9		
The Earmarks of a Good Reader	13 - 17 (5)	7	
Bicycle Earmarks	18 - 19 (2)	1	
Know Why You Read	20	4	
Hamster Homework	20 - 22 (2)	0	
Using Titles	23	2	
Making a Survey	24	3	
All About Clubs	25	3	
Will the Meeting Please Come to Order?	26 - 29 (4)	11	
Clubs from Old to New	30 - 32 (3)	3	
A Club for Everyone	33	3	
A Club of Your Own	34	3	
Help Yourself Remember	35	0	
Review Sentences	36 - 38 (3)	0	
Jet Riders	39 - 40 (2)	3	
A Secret Meeting	41 - 48 (8)	25	
The Great Cantellos	49 - 55 (7)	20	
The Last Lap	56 - 62 (7)	15	
Know the Meaning of Every Word	63 - 64 (2)	1	
Sentence Sense	65 - 68 (4)	13	
Paragraph Sense	69 - 70 (2)	5	
More Than One Meaning	71 - 72 (2)	3	

STORY	PAGES	NO. of NEW WORDS	NO. of NEW ELEMENTS
Unit 2:			
Be a Better Reader in Science	73	0	
Science and You	76 - 78 (3)	3	
Read As a Scientist Reads	79	2	
A Scientist's Reading Rules	80 - 81 (2)	2	
The World of Microbes	82	4	
Microbes Are Your Unseen Neighbors	83 - 85 (3)	6	
Keep a Record	86	0	
Microbes Were Discovered Long Ago	87 - 91 (5)	7	
Are You Keeping a Record?	92	0	
Microbes Live in Large Groups	93	4	
Bacteria	94	2	
Yeasts	95	0	
Molds	96	2	
Protozoans	97	4	
Microbes Multiply	98 - 99 (2)	3	
Microbes Live in Different Ways	100	1	
What Do Microbes "Eat"?	101 - 104 (4)	10	
Where Do Microbes Live?	105 - 106 (2)	4	
Microbes are Important to Us	107 - 108 (2)	7	
You Can Grow Microbes	109	3	
Using a Microscope	110	1	
Unit 3:			
Be a Better Reader in Social Studies	111		
People Live, Work, and Play Together	116 - 118 (3)	6	
Norway	119	4	
Reading Maps and Globes	119 - 123 (5)	7	
Land of the Midnight Sun	124 - 127 (4)	11	
Norway Long Ago	128 - 131 (4)	10	
Living in the City	132 - 135 (4)	5	
Going to School in the City	136 - 142 (7)	14	
Farms Everywhere	143 - 147 (5)	8	
Famous Fisherman	148 - 149 (2)	0	
Having Fun in Norway	150 - 152 (3)	6	
Lebanon	153	2	
Reading Maps and Globes	153 - 156 (4)	5	
"Land of Milk and Honey"	157 - 163 (7)	13	
The Cedars of Lebanon	164 - 165 (2)	4	
Beirut, a Busy Seaport	166 - 170 (5)	6	
A Visit with Jurjis	171 - 178 (8)	17	

STORY	PAGES	NO. of NEW WORDS	NO. of NEW WORD ELEMENTS
Unit 4: Be a Better Reader in Arithmetic	179	0	
Reading Is Important	181 - 182 (2)	2	
Just Like Being a Reporter	183 -	2	
A Reporter Knows When a Story Is a Problem	184 - 186 (3)	3	
A Reporter Finds Hidden Facts	187 -	2	
A Reporter Knows Which Facts Are Important	188 - 189 (2)	2	
Mark Writes an Arithmetic Story	190 - 191 (2)	2	
A Reporter Knows the Meaning of Every Word	192 - 193 (2)	2	
Problems Without Numbers	194 - 196 (3)	5	
Special Words in Arithmentic	197 - 199 (3)	7	
Puzzles for Fun	200 - 204 (5)	4	
Unit 5: Building Mental Pictures	205	1	
Your Mind's Eye	208 - 215 (8)	25	
Feel, Hear, and See	216 - 218 (3)	13	
Unit 6: Be a Better Reader When Reading Literature	219	0	
Reading Literature	222 -	4	
The Magic Boomerang	223	2	
A Strange Gift	223 - 230 (8)	11	
Into Space	231 - 234 (4)	12	
Planet X99	235 - 240 (6)	17	
In the Locked Room	241 - 245 (5)	9	
The Rescue	246 - 253 (8)	6	

APPENDIX C

HARPER AND ROW GRADE 3 LMS WORD ELEMENT AND WORD-ATTACK CONTENT
(THIRD READER - FROM FAR AWAY PLACES)

Unit	H & R Elements: Beginning	H & R Elements: Middle & Ending	Elements Derived from H & R Words	Practice Words: 1	2	3	4
1 pp. (6-36)	gl sp wr	ward	ain(explain)	ain main pain strain	gl glen glance glide	sp spike spell spoke	wr wren wrench wring
				mainstreet painful strained gain*	glider glancing glens glee* glow*	spelling* spiked spoken spin*	wrens wringer wrenches wrap*
2 pp. (37-78)	gu(guess)# tr	ment oat(boat)	eat(eaten)	eat heat wheat treat	oat goat gloat float	tr trash trace trend	gu guide guest guard
				reheat wheatfield treatment beat* meat*	goats gloating floated moat*	trashy tracing downtrend tray*	guidebook guestroom unguarded guile*
3 pp. (79-112)	sch scr	ew(new) nk or(for) ough(through) ought	ale(tales)	ale bale pale whale	ore sore fore store	ew dew stew crew	scr scrap screw scream
				impaled bales whalebone male* sale*	sorely foremost stores core*	dewdrop stewed crewmen blew*	scrappy screwdriver screaming scrub*

Unit	H & R Elements: Beginning	H & R Elements: Middle & Ending	Elements Derived from H & R Words	Practice Words: 1	2	3	4
4 pp. (113-160)	cl squ	ist some	ear(dear)	ist list mist wrist	cl clay clock cling	ear rear smear spear	some someday someplace tiresome
				wristlet misty unlisted fist*	clayish clinging clockwork clan* clap*	smeared spearman rearward fear*	somewhat sometime somewhere lonesome*
5 pp. (161-212)	mis shr tw	ble tion		tw twist twill tweed	tion nation notion lotion	mis mishap misname mistook	shr shrew shrink shrunk
				twilled tweeds twisting twin*	nations notionless lotions potion* motion*	mislay mislead misguided mistake*	shrewish shrinkage shrunken shred*
6 pp. (213-246)	dis	tle	ang(hanging) ant(planted) ead(bread)	ang fang hang bang	ead tread spread thread	ant rant slant chant	dis disjoin disown disagree
				fanged hangar banging tang*	treading spreader threadlike dead* dread*	ranting slanting enchantment pant*	dismay displace disagreement dismiss*
7 pp. (247-290)		eer igh ight ten	uck(bucket)	ten mitten often molten	eer deer steer engineer	ight slight fright bright	uck suck pluck truck
				mittens oftentimes moltenly bitten*	steering deerskin engineering peer* leer*	slightest frightened brighter tight*	sucker plucking trucker buck*

Unit	H & R Elements: Beginning	H & R Elements: Middle & Ending	Elements Derived from H & R Words	Practice Words 1	2	3	4
8	ch(chapel)	dle	eal(stealing)	ch	eal	eet	oy
pp. (291-347)	l	ie(believe)	eet(meet)	chop	meal	sheet	coy
				chat	heal	fleet	Roy
				chuck	peal	greet	ploy
				chatty	healer	greeter	Roy's
				chopper	mealtime	fleetness	coyly
				chuckwagon	pealing	sheets	ploys
				chew*	deal*	beet*	joy*
					seal*		

#Content or teacher manual words are in parentheses.
*Criterion Exercise or Mastery Test word.